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DESCRIPTION

Mounting for a device for the dispensing of a cooled
5 portion of ice cream

The present invention relates to a mounting for a device
for the dispensing of a cooled portion of ice cream, the
cooled portion of ice cream being made available in a
10 cartridge.

A device for the dispensing of a cooled portion of ice
cream is described for example in WO 01/78520 A1. With the
known device there is provided a cartridge with a portion
15 of ice cream located therein, which is tempered to a
dispensing temperature of about -10°C . The cartridge is
closed at its one end face by means of a cover, which has
an exit opening, and at its other end face by means of a
piston moveable in the cartridge. The known device has a
20 holder element for the cartridge and a holder element for
an ice cream cone or an ice cream tub. Thereby, the two
holder elements are so formed on the device that the exit
opening of the cartridge and the ice cream cone or the ice
cream tub are arranged vertically above one another when
25 the cartridge is in place and the ice cream cone/tub is in
place. For dispensing the cooled portion of ice cream
located in the cartridge the piston located in the
cartridge is moved by means of a delivery device, actuated
manually or via a lever, in the direction of the dispensing
30 opening of the cartridge, so that the portion of ice cream
located in the cartridge is dispensed through the
dispensing opening into the cone located therebelow.

Generally the known devices for the dispensing of a cooled
35 portion of ice cream are so configured that they can be
arranged free-standing for example on a table or the lid of
a freezer chest or cabinet. It would mean a

disproportionate waste of e.g. sales area, to provide a table specially for the device for the dispensing of a cooled portion of ice cream. On the other hand, the placing of the device on the lid of a freezer chest strongly
5 hinders the removal of the foodstuffs located in the freezer chest. Thus it is also known to fix, for example to a freezer chest containing the cartridges with the cooled portions of ice cream, a special small table for the device for the dispensing of a cooled portion of ice cream.
10 Thereby, the size of the small table is matched to the device for the dispensing of a cooled portion of ice cream.

The known small table for the device for the dispensing of a cooled portion of ice cream is illustrated in Fig. 6. The
15 illustrated small repository table has two U-shaped elements 61 each with a longer limb 62. The U-shaped elements 61 are formed to be hooked into an upper edge strip 64 of a freezer chest 65 and carry a horizontal table top 66 which is adapted in size to the device. Thereby the
20 U-shaped elements 61 support themselves with their longer limbs 62 on a side wall of the freezer chest 65, so that the table top 66 is held in the horizontal by the U-shaped elements 61.

25 With the known repository table for the device for the dispensing of a cooled portion of ice cream it is disadvantageous that beyond the area taken up by the freezer chest a further area must be made available for the small table. Further it is disadvantageous that the device
30 is only loosely arranged on the table top of the small table and thus can easily fall down. Additionally it is disadvantageous that the device, through the arrangement of the table at an edge region outside the freezer chest, is only poorly accessible in particular when there are a
35 number of operators. Also, the U-shaped elements of the known small table can readily be hooked out of the edge strip of the freezer chest through unintended knocking of

the small table, so that the small table together with the device for the dispensing of a cooled portion of ice cream falls to the floor.

- 5 Starting from this, it is the object of the present invention to make available a mounting for a device for the dispensing of a cooled portion of ice cream which manifests a minimal requirement for space and is suitable to hold the device at a readily accessible disposition.
- 10 The object is achieved by means of the features of independent claim 1. The invention is further developed in the subclaims.
- 15 In accordance with the present invention, a mounting for a device for the dispensing of a cooled portion of ice cream, the cooled portion of ice cream being made available in an ice cream cartridge, is proposed whereby the mounting includes a base plate for the device which is formed to be
- 20 releasably fixed to an upper edge region of a freezer chest, whereby the base plate has two fixing elements which include with one another an angle greater than zero degrees and are configured to come into releasable engagement with sections of the upper edge region of the freezer chest
- 25 which include the same angle with one another, and the base plate further carries a vertical column which is configured to hold the device for the dispensing of a cooled portion of ice cream.
- 30 With the mounting proposed in accordance with the invention it is possible to arrange a device for the dispensing of a cooled portion of ice cream above a freezer chest, so that the mounting in accordance with the invention takes up no additional area. Further, the device arranged by means of
- 35 the claimed mounting is well accessible also for a plurality of users, since the device can be arranged within the area taken up by the freezer chest, and thus as a rule

can be readily reached from all sides of the freezer chest. Since the device in accordance with the present invention is further held by a column, which in turn is carried by a base plate of the mounting, the mounting in accordance with
5 the invention can effectively prevent that the device is unintentionally tipped over, falls to the floor and is contaminated or damaged.

If the device for the dispensing of a cooled portion of ice
10 cream is to be able to be operated alternately by a number of users it is particularly advantageous if the column of the mounting in accordance with the invention is configured to allow a rotation around the column of a device for the dispensing of a portion of cooled ice cream held by the
15 column, since the device can thus be made optimally accessible to each user by simple rotating.

In order to avoid falling down of the mounting in accordance with the invention as a whole, the two fixing
20 elements are in accordance with a preferred exemplary embodiment configured to come into a snap connection with the edge region of the freezer chest. In accordance with an alternative embodiment the two fixing elements may however be so configured as to come into a clamping connection with
25 the edge region of the freezer chest.

Further, the mounting in accordance with the invention can be fastened to a freezer chest in a particularly rapid and uncomplicated manner by means of the configuration of the
30 two fixing elements for a snap or clamping connection.

In accordance with a particularly preferred embodiment it is of advantage if the mounting further has a carrier arm which is rotatably attached to the column and includes with
35 the column an angle of inclination greater than zero degrees, whereby the device for the dispensing of a cooled portion of ice cream is attached to the carrier arm so that

in a simple manner a defined inclination of the device with respect to the vertical can be obtained, which makes it possible for the user to check the functioning of the device comfortably visually.

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In order to further ensure good accessability to the goods located in the freezer chest it is particularly advantageous if the two fixing elements and the base plate are so configured that a sliding lid of the freezer chest
10 arranged below the base plate can be displaced.

So that the device in accordance with the invention can be arranged upon a commonplace freezer chest having a rectangular basic shape, the two fixing elements include
15 with one another preferably an angle of 90 degrees.

In the following, the invention will be described in more detail with reference to Figures, which show:-

20 Fig.1 schematically the structure of a mounting for a device for the dispensing of a cooled portion of ice cream according to the invention, in accordance with a first preferred embodiment;

25

Figs. 2, 3

& 4

alternative configurations of the fixing elements of the mounting in accordance with the invention, in cross-section;

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Fig. 5

schematically the structure of a mounting for a device for the dispensing of a cooled portion of ice cream according to the invention, in accordance with a second
35 preferred embodiment;

Fig. 6

schematically the structure of a small table

for a device for the dispensing of a cooled portion of ice cream, in accordance with the state of the art.

5 In Figs. 1 to 5 the same elements are provided with the same reference signs.

Fig. 1 shows schematically the structure of a first preferred embodiment of a mounting in accordance with the present invention, for a device 1 for the dispensing of a
10 cooled portion of ice cream, the cooled portion of ice cream being made available in a cartridge 2.

The mounting shown in Fig. 1 includes a base plate 6 which
15 has two fixing elements 3₁, 3₂, the two fixing elements 3₁, 3₂ including with one another in the horizontal an angle β greater than zero degrees. The fixing elements 3₁, 3₂ are so configured that they can releasably come into engagement with sections of the upper edge region 4 of a freezer chest
20 5 which include in the horizontal the same angle β . Thereby the base plate 6 and the two fixing elements 3₁, 3₂ are preferably so configured that a sliding lid 8 of the freezer chest 5 arranged below the base plate 6 can be displaced when the mounting is mounted. In the preferred
25 embodiment illustrated in Fig. 1, the base plate 6 and the fixing elements 3₁, 3₂ are formed in one piece of sheet metal. Alternatively, these elements may however be formed for example of plastics or be assembled of different materials.

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In the illustrated preferred embodiment the angle β between the fixing elements 3₁, 3₂ is ninety degrees, so that the fixing elements 3₁, 3₂ can be arranged in a corner region of a freezer chest 5 having a rectangular shape and come into
35 engagement with corresponding sections of the edge region 4 of the freezer chest 5.

Generally it is however advantageous if the angle β between the fixing elements 3₁, 3₂ is between 45 degrees and 135 degrees, since the spatial three-legged form spanned by the fixing elements 3₁, 3₂, which carries the base plate 6, has
5 a particularly good stability in this range of angles. Consequently, with such a construction of the mounting in accordance of the invention there can be omitted a generally very advantageous force-fit connection between the fixing elements 3₁, 3₂ and edge region 4 of the freezer
10 chest 5.

Thus it is possible to so configure the fixing elements 3₁, 3₂ for example that they can be placed into a groove which is formed in the edge region 4 of the freezer chest 5. This
15 is illustrated in Fig. 3 and allows a particularly flexible positioning of the mounting in accordance with the invention on the freezer chest 5.

As is shown in Figs. 2 and 4 it is however alternatively
20 particularly advantageous to so configure the fixing elements 3₁, 3₂ that they come into a clamping connection or snap connection with the edge region 4 of the freezer chest 5. Thereby, an engagement around the edge region 4 can also be effected. By means of the provision of such a releasable
25 force-fit connection between the fixing elements 3₁, 3₂ and the edge region 4 of the freezer chest 5 the mounting in accordance with the invention can be particularly reliably secured against falling down. Further, the mounting in accordance with the invention can thus be provided also on
30 freezer chests 5 for which the spatial three-legged form spanned by the fixing elements 3₁, 3₂, due to an unfavourable development of the edge region 4 and an unfavourable angle β resulting therefrom, would not alone guarantee sufficient stability of the mounting.

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If the freezer chest has, in contrast, an oval or round shape as is illustrated in Fig. 5 with regard to a second

preferred embodiment of the mounting in accordance with the invention, the fixing elements 3_1 , 3_2 of the mounting in accordance with the invention are to be so configured that they come into engagement with sections of the upper edge
5 region 4 of a freezer chest 5 the tangents of which include the same angle β as the fixing elements 3_1 , 3_2 . With such a configuration it is further advantageous to configure the fixing elements 3_1 , 3_2 to be arc shaped.

10 As is further evident from Figs. 1 and 5, the base plate 6 carries a vertical column 7 which holds the device 1 for the dispensing of a cooled portion of ice cream.

Thereby there is attached - as illustrated in Fig. 1 - to
15 the column 7 preferably a carrier arm 9 for the device 1, which includes with the column 7 an angle of inclination α greater than zero degrees and which is rotatable around the column 7.

20 Consequently the device 1 attached to the carrier arm 9 is also inclined with respect to the column 7 and thus with respect to the vertical, which facilitates a comfortable visual checking of the device 1 by the user and makes possible a reliable operation of the device 1. An angle of
25 inclination α of between 5° and 20° , and in particular between 10° and 15° with respect to the vertical has proved to be particularly advantageous.

Alternatively, the device 1 can however be held to be
30 directly rotatable (or also fixed against rotation) by the column 7, as is illustrated in Fig. 5.

An arrangement of the device 1 to be rotatable around the column 7 of the mounting in accordance with the invention
35 thereby allows, also for a plurality of users, particularly comfortable operation of the device 1, since the device 1 can rapidly and simply be made accessible for a user

through rotation.

Thus, it is possible with the mounting proposed in accordance with the invention to arrange a device 1 for the dispensing of a cooled portion of ice cream above a freezer chest 5, so that the mounting in accordance with the invention takes up no additional area. Further, the device mounted with the mounting in accordance with the invention is, due to its relatively central arrangement, well accessible even for a plurality of users and secured against falling down by the column 7 carried by base plate 6 of the mounting. A good accessability of the goods located in the freezer chest 5 can also be further ensured, since the movement of the sliding lid 8 of the freezer chest 5 is preferably not restricted by the mounting in accordance with the invention.

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C L A I M S

1. Mounting for a device (1) for the dispensing of a cooled portion of ice cream, the cooled portion of ice cream being made available in an ice cream cartridge (2), the mounting including a base plate (6) for the device (1) which is configured to be releasably fixed on an upper edge region (4) of a freezer chest (5), characterized in that,
- 5 the base plate (6) has two fixing elements (3₁, 3₂) which include with one another an angle (β) greater than zero degrees and are configured to come into releasable engagement with sections of the upper edge region (4) of the freezer chest (5) which include the same angle (β) with one another, and
- 10 in that the base plate (6) further carries a vertical column (7) which is configured to hold the device (1) for the dispensing of a cooled portion of ice cream.
- 15
- 20 2. Mounting according to claim 1, characterized in that, the column (7) is configured to allow a rotation around the column (7) of a device (1) for the dispensing of a cooled portion of ice cream which is held by the column (7).
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3. Mounting according to claim 1 or 2, characterized in that, the two fixing elements (3₁, 3₂) are configured to come into a snap connection with the edge region (4) of the freezer chest (5).
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4. Mounting according to claim 1 or 2, characterized in that, the two fixing elements (3₁, 3₂) are configured to come into a clamping connection with the edge region (4) of the freezer chest (5).
- 35

5. Mounting according to any preceding claim,
characterized in that,
the mounting further has a carrier arm (9) which is
5 rotatably fixed to the column (7) and includes with
the column (7) an angle of inclination (α) greater
than zero degrees, whereby the device (1) for the
dispensing of a cooled portion of ice cream is fixed
to the carrier arm (9).
- 10 6. Mounting according to any preceding claim,
characterized in that,
the two fixing elements (3_1 , 3_2) and the base plate (6)
are so configured that a sliding lid (8) of the
15 freezer chest (5) arranged below the base plate (6)
can be displaced.
- 20 7. Mounting according to any preceding claim,
characterized in that,
the two fixing elements (3_1 , 3_2) include with one
another an angle (β) of ninety degrees.

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A B S T R A C T

According to the present invention there is proposed a mounting for a device 1 for the dispensing of a cooled portion of ice cream, the cooled portion of ice cream being made available in an ice cream cartridge 2, the mounting including a base plate 6 for the device 1 which is configured to be releasably fixed on an upper edge region 4 of a freezer chest 5, and the base plate 6 has two fixing elements 3₁, 3₂ which include with one another an angle β greater than zero degrees and are configured to come into releasable engagement with sections of the upper edge region 4 of the freezer chest 5 which include the same angle β with one another, and whereby the base plate 6 further carries a vertical column 7 which is configured to hold the device 1 for the dispensing of a cooled portion of ice cream.

(Figure 1)